Amendments to the Claims:

1-10. (Cancelled)

11. (Currently Amended) A refining surface of a refiner, the refiner having two opposed refining surfaces coaxially-disposed along an axis, with at least one of the refining surfaces being configured to rotate about the axis in a rotation direction, and the refining surfaces being configured to receive a lignocellulose material therebetween for defibering thereof, the refining surface comprising:

a plurality of radially-extending bars defining grooves between adjacent bars, each bar having a radially-extending length and an angularly-extending width, at least one of the bars including a non-concave bevel extending from a leading edge of the bar, the leading edge being defined with respect to the interaction of the non-concave bevel with the opposed refining surface, the non-concave bevel extending across the bar for less than the entire width thereof, the remainder of the width of the bar being substantially parallel to the refining surface, the leading edge of the non-concave bevel being further configured such that, as an opposed bar of the opposed refining surface approaches axial coincidence with the non-concave bevel, an increasing force is generated substantially perpendicularly to the refining surface and axially outward with respect to the opposed refining surfaces.

12. (Currently Amended) A refining surface according to Claim 11, wherein less than all of the plurality of bars includes the non-concave bevel.

13. (Currently Amended) A refining surface according to Claim 11 wherein the non-concave bevel is configured so as to define a ratio between a maximum clearance (H_1) and a minimum clearance (H_2) between bars of the opposed refining surfaces, $H_1/H_2 = 2.2 \pm 50\%$.

14. (Previously Presented) A refining surface according to Claim 13, wherein the ratio is $H_1/H_2 = 2.2 \pm 20\%$.

15. (Previously Presented) A refining surface according to Claim 13, wherein the ratio is $H_1/H_2 = 2.2$.

16. (Currently Amended) A refining surface according to Claim 11, wherein the non-concave bevel extends for less than the entire length of the bar.

17. (Currently Amended) A refining surface according to Claim 11, wherein at least one of the bars includes a plurality of non-concave bevels, with the non-concave bevels extending for less than the entire width of the bar, and each non-concave bevel having a different slope with respect to the bar.

18. (Currently Amended) A refining surface according to Claim 17, wherein the non-concave bevels are serially disposed across the bar, for less than the entire width thereof, such that the slope decreases with each non-concave bevel, each non-concave bevel being successively disposed axially inward with respect to the opposed refining surfaces.

19. (Currently Amended) A refining surface according to Claim 17, wherein the bars spaced apart in an angular direction about the refining surface alternatingly include non-concave bevels having different slopes.

20. (Currently Amended) A refining surface according to Claim 11, wherein at least one of the non-concave bevels defines a slope with respect to the bar, the slope being configured to vary along the length of the bar.